charge of his case, will be obtained on the claim. I would endorse the article's warning against advising patients that their claims are likely to succeed, as in some cases this may well give rise to unjustified hopes. There is useful information in the booklet *Notes on the Diagnosis of Occupational Diseases*.¹

It is only if the relevant occupational exposure occurred subsequent to 5 July 1948 that cases will be dealt with as claims to PD 39 under the Social Security Act 1975. If the industrial exposure was before 5 July 1948 a different scheme applies. Under the post-July-1948 scheme the major benefit is based on disability; but under the pre-July-1948 scheme benefit is related to total or partial incapacity for work.

Because the carcinogens responsible for causing urothelial tumour were withdrawn from industrial use in the early 1950s, the number of cases should show a decline over the next decade.

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¹ Department of Health and Social Security. *Notes on the diagnosis of occupational diseases*. London: HMSO, 1979.

Management of acute illness in infants

SIR,—Few would disagree with the recommendations of Dr A N Stanton and others (29 March, p 897) from their uncontrolled study of children admitted to hospital that "daily reassessment by a professionally qualified person should be the normal practice when a child has major symptoms."

I wish they had made the point that a doctor with adequate postgraduate training in paediatrics should be able to appreciate the significance of the behavioural and other symptoms often elicited by careful history taking. Before calling on the unspecialised health visitor to remedy yet another lacuna in the services we should ensure that all general practitioners have, within the setting of a hospital team, an experience of serious illness in infancy and childhood which enables them to acquire the clinical judgment and competence to assess the sick young child in the first place.

Health education of parents is another way in which avoidable infant deaths may be reduced; but while the doctor can advise and inform parents he himself must first be adequately trained.

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Interaction between oral contraceptives and other drugs

SIR,—I should like to make some comments concerning the paper by Drs Janet F Bacon and Gillian M Shenfield (2 February, p 293).

They have suggested that the decreased blood levels of steroids associated with co-administration of rifampicin and oral contraceptives is due to an interruption in the entero-hepatic circulation of steroids. However, administration of rifampicin causes proliferation of the smooth endoplasmic reticulum of the hepatocyte and induces drug-metabolising enzyme systems in the liver (the cytochrome P450 content of the liver is increased). Steroid

hormones are eliminated mainly by metabolism in the liver. Hence the hepatic clearance (or rate of removal from the body) of steroid hormones is increased when these are given in conjunction with enzyme-inducing agents such as rifampicin, phenobarbital, glutethimide, and phenytoin.^{1,2} An increase in hepatic clearance results in decreased plasma levels of the drug.

This mechanism of drug interaction is a common one and may explain the reported results.

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¹ Acocella G. *Clin Pharmacokinet* 1978;3:108-27.

² Gibaldi M. *Biopharmaceutics and clinical pharmacokinetics*, 2nd ed. Philadelphia: Lea and Febiger, 1977:109-51.

Multiple sclerosis: what can and cannot be done

SIR,—The difference between the poor result (75% success) obtained with the erythrocyte electrophoretic mobility (E-UFA) test¹ in Göttingen referred to by Drs S Poser and W Poser (19 January, p 184) in their comments on our paper (15 December, p 1591) and the excellent results of coded trials in England,² Italy,³ and America⁴ led us to conclude that the difference must lie in the biological material. Since many German patients with multiple sclerosis (and most errors were among this group) were currently, or recently had been, under heavy medication with adrenocorticotrophic hormone (ACTH), as well as other drugs, while we ourselves had always worked with cases currently free from corticosteroid treatment, we made a specific study of the effect of ACTH on the E-UFA test result. This has shown that a positive result in multiple sclerosis is converted into a negative one after a few days' treatment and that this false result persists for about three weeks after cessation of the steroid course. On the other hand, a patient not having multiple sclerosis initially giving a negative result with the E-UFA test converts to a positive one, which again persists for three weeks.⁵ This phenomenon, incidentally, affords an explanation for the very short life (5-10 minutes) of ACTH in the blood, there being rapid adsorption on to the red blood cell surface. Early or untreated cases were not available in Göttingen, nor were mothers for confirmatory testing.

The Posers alone advance Thompson's heuristic hypothesis⁶ to the status of a "proved fact." Our own results can only be interpreted as supporting it. Dr J H D Millar (19 January, p 184) points out that the value of γ -linolenate—based on the supposition, now discarded,⁷ of its immunosuppressive activity—is not yet substantiated. There is no doubt that γ -linolenate alters the character of the red blood cell membrane,⁸ and the original anomaly is not due to a plasma factor.⁹ The real value of the E-UFA test lies largely in early diagnosis, and above all in prophylaxis⁷ and the possibility of setting up a controlled trial among children singled out as "multiple sclerosis candidates" before myelin is fully laid down. Encouraged by the confirmations cited above, we formally propose that a positive E-UFA test be added to the Schumacher criteria for diagnosis of multiple sclerosis.

The Posers pass over the critical analysis by Seaman *et al*⁴ of recorded false results and

choose to ignore Claude Bernard's warning¹⁰ about the importance of all the details of investigative procedures. They take a very selective and unsophisticated view of myelin constitution, neglecting all-important steric considerations. So far as the inability of Seaman *et al* to pick up a few patients with (unspecified) "minimal neurological findings" is concerned, note should be taken of Fog's opinion¹¹ that "the percentage of false diagnosis of multiple sclerosis is about 20% . . . and in both directions," and the similar uncertainties expressed by Bauer at the same symposium. Dr Millar was present at this symposium and accorded his assent. We too have patients referred by both general practitioners and consultants who cannot make up their minds early in the disease (and sometimes late).

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¹ Field EJ, Joyce G, Smith BM. *J Neurol* 1977;214:113-27.

² Field EJ, Joyce G. *Lancet* 1977;ii:658.

³ Bisaccia G, Caputo D, Zibetti A. *Boll Ist Sieroter Milan* 1977;56:583-8.

⁴ Seaman GVF, Swank RL, Tamblyn CH, Zukoski CF jun. *Lancet* 1979;ii:1138-9.

⁵ Field EJ, Joyce G. *IRCS Med Sci* 1980;8:82.

⁶ Thompson R. *Biochem Soc Symp* 1973;35:103-11.

⁷ Field EJ. *J R Soc Med* 1979;73:487-8.

⁸ Field EJ, Joyce G. *Europ Neurol* 1978;17(2):67-76.

⁹ Field EJ, Joyce G. *Lancet* 1979;ii:1012-3.

¹⁰ Bernard CM. *Introduction à l'étude de la médecine expérimentale*. p 27-8. London: Ballière et fils, 1865:27-8.

¹¹ Fog T. *Acta Neurol Scand* 1974; suppl 58:50.

Treatment of meningitis

SIR,—Dr P J Geiseler (23 February, p 566) in making a case against the administration of antibiotics before lumbar puncture to patients with clinically diagnosed meningitis quotes his review¹ of 1316 cases of community-acquired purulent meningitis. This is a most impressive number of cases and the study could yield some worthwhile information. As his paper is in press, perhaps Dr Geiseler would be good enough to say whether in his study he looked at the effects of corticosteroids on the survival rate in bacterial meningitis. It would be very interesting and most useful to know what percentage in his study were treated with corticosteroids, and particularly what percentage of the 103 fatal cases had been given corticosteroids before death.

Some clinicians are not convinced that any advantage from the administration of corticosteroids in severe life-threatening meningitis has been demonstrated² and Dr Geiseler's review might provide that evidence.

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¹ Geiseler PJ, Nelson KE, Levin S, Reddi KT, Moses VK. *Rev Inf Dis* (in press).

² Anonymous. *Br Med J* 1979;iii:953.

* * * We sent a copy of this letter to Dr Geiseler, whose reply is printed below.—ED, *BMJ*.

SIR,—In response to Dr Cargill's inquiry, we did not study the effects of corticosteroids on survival in our review of 1316 cases of community-acquired bacterial meningitis. It would have required a controlled study, which was not performed.